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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Francine Foss
Serial No. : 10/706,801
Filed : November 12, 2003
Title : INTERLEUKIN-7 MOLECULES WITH ALTERED BIOLOGICAL PROPERTIES

Art Unit : Unknown
Examiner : Unknown

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Commissioner for Patents
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Alexandria, VA 22313-1450

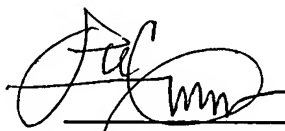
INFORMATION DISCLOSURE STATEMENT

Applicant submits references AL-AVVV listed on the attached form PTO-1449. The office has waived the requirement under 37 CFR 1.98(a)(2)(c) for submitting a copy of cited U.S. patents for U.S. applications filed after June 30, 2003. Therefore copies of references AA-AK on the 1449 are not provided.

This statement is being filed before the receipt of a first Office action on the merits. No fees are believed to be due. If this is incorrect, any necessary charges or credits can be applied to Deposit Account No. 06-1050, with reference to Attorney Docket No. 00398-152001.

Respectfully submitted,

Date: August 9, 2004



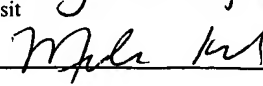
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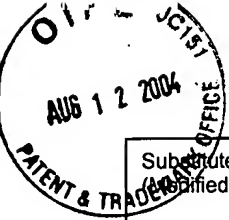
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Substitute Form PTO-1449 (Unmodified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 00398-152001	Application No. 10/706,801
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Francine Foss	
		Filing Date November 12, 2003	Group Art Unit

U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	4,816,567	5/28/1989	Cabilly et al.			4/8/2003
	AB	5,223,409	6/29/1993	Ladner et al.			5/1/1991
	AC	5,849,500	12/15/1998	Breitling et al.			6/7/1992
	AD	6,153,183	1/28/2000	Bauer et al.			2/04/1994
	AE	6,361,976	5/26/2002	Bauer et al.			6/6/1995
	AF	6,361,977	5/26/2002	Bauer et al.			2/2/1995
	AG	6,379,662	4/30/2002	McKearn et al.			6/6/1995
	AH	6,403,076	6/11/2002	Bauer et al.			6/6/1995
	AI	6,407,218	6/18/2002	Tamarkin et al.			11/10/1998
	AJ	6,413,509	7/2/2002	Bauer et al.			12/9/1996
	AK	6,436,387	8/20/2002	Bauer et al.			12/9/1996

Foreign Patent Documents or Published Foreign Patent Applications

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AL	WO 86/01533	3/13/1986	PCT				
	AM	WO 90/02809	3/22/1990	PCT				
	AN	WO 91/00906	1/24/1991	PCT				
	AO	WO 91/10741	7/25/1991	PCT				
	AP	WO 91/17271	11/14/1991	PCT				
	AQ	WO 92/01047	1/23/1992	PCT				
	AR	WO 92/03917	3/19/1992	PCT				
	AS	WO 92/03918	3/19/1992	PCT				
	AT	WO 92/09690	6/11/1992	PCT				
	AU	WO 92/15679	9/17/1992	PCT				
	AV	WO 92/18619	10/29/1992	PCT				
	AW	WO 92/20791	11/26/1992	PCT				
	AX	247,091	9/29/93	Europe				

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

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							Yes	No
	AY	125,023	3/13/02	Europe				
	AZ	171,496	5/26/93	Europe				
	AAA	173,494	3/5/86	Europe				
	ABB	184,187	6/11/86	Europe				

Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	ACC	Barbas et al., "Assembly of Combinatorial Antibody Libraries on Phage Surfaces: The Gene III Site," PNAS, 88:7978-7982 (1991)
	ADD	Bajorath et al., "Knowledge-Based Model Building of Proteins: Concepts and Examples," Protein Sci., 2:1798-1810 (1993)
	AEE	Better et al., "Escherichia coli Secretion of an Active Chimeric Antibody Fragment," Science, 240:1041-1043 (1988)
	AFF	Bird et al., "Single-Chain Antigen-Binding Proteins," Science, 242:423-426 (1988)
	AGG	Bruggeman et al., "Human Antibody Production in Transgenic Mice: expression from 100 kb of the human IgH locus," Eur. J. Immunol., 21:1323-1326 (1991)
	AHH	Bruggeman et al., "Designer Mice: The Production of Human Antibody Repertoires in Transgenic Animals," Year Immunol., 7:33-40 (1993)
	AII	Campbell et al., "Phosphotyrosine-dependent Association Between CD22 and Protein Tyrosine Phosphatase 1C," Eur. J. Immunol., 25:1573-1579 (1995)
	AJJ	Chothia et al., "Canonical Structures for the Hypervariable Regions of Immunoglobulins," J. Mol. Biol., 196:901-917 (1987)
	AKK	Clackson et al., "Making Antibody Fragments Using Phage Display Libraries," Nature, 352:624-628 (1991)
	ALL	Cosenza et al., "Disulfide Bond Assignment in Human Interleukin-7 by Matrix-assisted Laser Desorption/Ionization Mass Spectroscopy and Site-directed Cysteine to Serine Mutational Analysis," J. Biol. Chem., 272:32995-33000 (1997)
	AMM	Cosenza et al., "Comparative Model Building of Interleukin-7 Using Interleukin-4 as a Template: A Structural Hypothesis that Displays Atypical Surface Chemistry in helix D Important for Receptor Activation," Protein Science, 9:916-926 (2000)
	ANN	Davies et al., "Cytokines and their Receptor Complexes," FASEB J., 9:50-56 (1995)
	AOO	Foxwell et al., "Interleukin-7 can induce the Activation of Jak 1, Jak 3 and STAT 5 proteins in Murine T Cells," Eur. J. Immunol., 25:3041-3046 (1995)
	APP	Fuchs et al., "Targeting Recombinant Antibodies to the Surface of Escherichia Coli: Fusion to a Peptidoglycan Associated Lipoprotein," Bio/Technology, 9:1369-1372 (1991)
	AQQ	Garrad et al., "FAB Assembly and Enrichment in a Monovalent Phage Display System," Bio/Technology, 9:1373-1377 (1991)

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	ARR	Goodwin et al., "Cloning of the Human and Murine Interleukin-7 Receptors: Demonstration of a Soluble Form and Homology to a New Receptor Superfamily," <i>Cell</i> , 60:941-951 (1990)
	ASS	Görgün et al., "Altered Biological Activity Associated with C-Terminal Modifications of IL 7," <i>Cytokine</i> , 20:17-22 (2002)
	ATT	Gram et al., "In Vitro Selection and Affinity Maturation of Antibodies from a naive Combinatorial Immunoglobulin Library," <i>PNAS</i> , 89:3576-3580 (1992)
	AUU	Green et al., "Antigen-specific Human monoclonal Antibodies From Mice Engineered with Human Ig Heavy and Light Chain YACs," <i>Nature Genet.</i> , 7:13-21 (1994)
	AVV	Griffiths et al., "Human Anti-self Antibodies with High Specificity from Phage Display Libraries," <i>EMBO J.</i> , 12:725-734 (1993)
	AWW	Hofmeister et al., "Interleukin-7: Physiological roles and Mechanisms of Action," <i>Cytokine Growth Factor Rev.</i> , 10:41-60 (1999)
	AXX	Hoogenboom et al., "Multi-Subunit Proteins on the Surface of Filamentous Phage: Methodologies for Displaying Antibody (Fab) Heavy and Light Chains," <i>Nuc. Acid Res.</i> , 19:4133-4137 (1991)
	AYY	Hawkins et al., "Selection of Phage Antibodies by Binding Affinity," <i>J. Mol. Biol.</i> , 226:889-896 (1992)
	AZZ	Hay et al., "Bacteriophage Cloning and <i>Escherichia Coli</i> Expression of a Human IgM Fab," <i>Hum. Antibod. Hybridomas</i> , 3:81-85 (1992)
	AAAA	Huse et al., "Generation of a Large Combinatorial Library of the Immunoglobulin Repertoire in Phage Lambda," <i>Science</i> , 246:1275-1281 (1989)
	ABBB	Huston et al., "Protein Engineering of Antibody Binding Site: Recovery of Specific Activity in a Anti-Digoxin Single-Chain Fv Analogue Produced in <i>Escherichia Coli</i> ," <i>Proc. Natl. Acad. Sci. USA</i> , 85:5879-5883 (1988)
	ACCC	Kabat et al., <i>Sequences of Proteins of Immunological Interest</i> , Fifth Edition, U.S. Department of Health and Human Services, NIH Publication No. 91-3242 (1991)
	ADDD	Kruse et al., "Conversion of Human Interleukin-4 into a High Affinity Antagonist by a Single Amino Acid Replacement," <i>EMBO J.</i> , 11:3237-3244 (1992)
	AEEE	Liu et al., "Production of a Mouse-Human Chimeric Monoclonal Antibody to CD20 With Potent Fc-Dependent Biologic Activity," <i>J. Immunol.</i> , 139:3521-3526 (1987)
	AFFF	Liu et al., "Chimeric Mouse-Human IgG1 Antibody that Can Mediate Lysis of Cancer Cells," <i>PNAS</i> , 84:3439-3443 (1987)
	AGGG	Lonberg et al., "Antigen-Specific Human Antibodies from Mice Dcomprising Four Distinct Generic Modifications," <i>Nature</i> , 368:856-859 (1994)
	AHHH	Lupton, et al., "Characterization of the Human and Murine IL-7 Genes," <i>J. Immunol.</i> , 144:3592-3601 (1990)
	AIII	Morrison et al., "Chimeric Human Antibody Molecules: Mouse Antigen-Binding Domains with Human Constant Region Domains," <i>Proc. Natl. Acad. Sci. USA</i> , 81:6851-6855 (1994)
	AJJJ	Nishimura et al., "Recombinant Human-Mouse Chimeric Monoclonal Antibody Specific For Common Acute Lymphocytic Leukemia Antigen," <i>Canc. Res.</i> , 47:999-1005 (1987)
	AKKK	Noguchi et al., Interleukin-2 Receptor γ Chain: A Functional Component of the Interleukin-7 Receptor," <i>Science</i> , 262:1877-1880 (1993)
	ALLL	Olosz, et al. "Three Loops of the Common γ Chain Ectodomain Required for the Binding of Interleukin-2 and Interleukin-7" <i>J. Biol. Chem.</i> 275:30100-30105 (2000)

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	AMMM	Page et al., "Interleukin-7 Activates p56 ^{lck} and p59 ^{lyn} , Two Tyrosine Kinases Associated with the p90 Interleukin-7 Receptor in Primary Human T Cells," Eur. J. Immunol., 25:2956-2960 (1995)
	ANNN	Porter et al., "Control of T Cell Development In Vivo by Subdomains Within the IL-7 Receptor α -Chain Cytoplasmic Tail," J. Immunol., 166:262-269 (2001)
	AOOO	Seckinger et al., "Activation of <i>src</i> Family Kinases in Human Pre-B Cells by IL-7," J. Immunol., 153:97-109 (1994)
	APPP	Shaw et al., "Mouse/Human Chimeric Antibodies to a Tumor-Associated Antigen: Biologic Activity of the Four Human IgC Subclasses," J. Natl. Cancer Inst., 80:1553-1559 (1988)
	AQQQ	Sun et al., "Chimeric Antibody with Human Constant Regions and Mouse Variable Regions Directed Against Carcinoma-Associated Antigen 17-1A," PNAS, 84:214-218 (1987)
	ARRR	Tuaillon et al., "Human Immunoglobulin Heavy-Chain Minilocus Recombination in Transgenic Mice: Gene-Segment Use in <i>u</i> and <i>y</i> Transcripts," PNAS, 90:3720-3724 (1993)
	ASSS	vanderSpek et al., "Structure Function Analysis of Interleukin 7: Requirement For an Aromatic Ring at Position 143 of Helix D," Cytokine, 17:227-233 (2002)
	ATTT	Venkitaraman et al., "Interleukin-7 Induces the Association of Phosphatidylinositol 3-Kinase with the <i>a</i> chain of the Interleukin-7 Receptor," Eur. J. Immunol., 24:2168-2174 (1994)
	AUUU	Ward et al., "Binding Activites of a Repertoire of Single Immunoglobulin Variable Domains Secreted From <i>Escherichia Coli</i> ," Nature, 341:544-546 (1989)
	AVVV	Wood et al., "The Synthesis and <i>In Vivo</i> Assembly of Functional Antibodies in Yeast," Nature, 314:446-449 (1985)

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